POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)

POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES) – CYLINDRICAL TYPE LITHIUM BATTERIES

Ever since their market launch in 1973, our Poly-Carbonmonofluoride Lithium batteries (BR series) have accumulated a proven track record and figured prominently as the batteries of choice for varied applications. In particular, their long-term operating performance spanning some ten years has made them the ideal power supply for products such as meters or smoke detectors, and they continue to lead the way in applications that demand long-term reliability.

<table>
<thead>
<tr>
<th>Model number</th>
<th>Electrical Characteristics at 20°C</th>
<th>Dimensions (mm)</th>
<th>Approx. Weight (g)</th>
<th>JIS</th>
<th>IEC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal Voltage (V)</td>
<td>Nominal Capacity (mAh)</td>
<td>Continuous Standard Drain (mA)</td>
<td>Diameter</td>
<td>Height</td>
</tr>
<tr>
<td>BR-1/2AA**1</td>
<td>3</td>
<td>1,000</td>
<td>2.5</td>
<td>14.5</td>
<td>25.5</td>
</tr>
<tr>
<td>BR-2/3A</td>
<td>3</td>
<td>1,200</td>
<td>2.5</td>
<td>17.0</td>
<td>33.5</td>
</tr>
<tr>
<td>BR-2/3AG</td>
<td>3</td>
<td>1,450</td>
<td>2.5</td>
<td>17.0</td>
<td>33.5</td>
</tr>
<tr>
<td>BR-A</td>
<td>3</td>
<td>1,800</td>
<td>2.5</td>
<td>17.0</td>
<td>45.5</td>
</tr>
<tr>
<td>BR-AG</td>
<td>3</td>
<td>2,200</td>
<td>2.5</td>
<td>17.0</td>
<td>45.5</td>
</tr>
<tr>
<td>BR-C</td>
<td>3</td>
<td>5,000</td>
<td>5.0</td>
<td>26.0</td>
<td>50.5</td>
</tr>
</tbody>
</table>

Applications

→ Heatcost allocators
→ Water & Gas meters
→ ETC (Electronic Toll Collection) systems

→ Smoke detectors
→ Entry Systems
→ Data Loggers, etc.

3D ILLUSTRATION

1 Positive pole
2 Positive pole platform
3 Jacket
4 Cell can
5 Collector
6 Negative pole
7 Insulator
8 Anode (lithium)
9 Cathode (carbonmonofluoride)
10 Separator
11 Gasket

**1 G indicates higher capacity versions.
**2 Based on standard drain and cut off voltage down to 2.0V at 20°C.
**3 This cell is only available with assembled tab.
## POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)

### BR-1/2AA

**Specifications**

<table>
<thead>
<tr>
<th>Name</th>
<th>BR-1/2AA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage (V)</td>
<td>3</td>
</tr>
<tr>
<td>Nominal capacity (mAh)</td>
<td>1,000</td>
</tr>
<tr>
<td>Continuous drain (mA)</td>
<td>2.5</td>
</tr>
<tr>
<td>Operating temperature (°C)</td>
<td>-40 to +100</td>
</tr>
<tr>
<td>Weight (g)</td>
<td>8.0</td>
</tr>
</tbody>
</table>

### BR-2/3A

**Specifications**

<table>
<thead>
<tr>
<th>Name</th>
<th>BR-2/3A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage (V)</td>
<td>3</td>
</tr>
<tr>
<td>Nominal capacity (mAh)</td>
<td>1,200</td>
</tr>
<tr>
<td>Continuous drain (mA)</td>
<td>2.5</td>
</tr>
<tr>
<td>Operating temperature (°C)</td>
<td>-40 to +85</td>
</tr>
<tr>
<td>Weight (g)</td>
<td>13.5</td>
</tr>
</tbody>
</table>

### Discharge Temperature Characteristics

![Discharge Temperature Characteristics](image)

### Discharge Temperature Characteristics

![Discharge Temperature Characteristics](image)

### Operating Voltage vs. Discharge Current*

![Operating Voltage vs. Discharge Current](image)

*Voltage at 50% discharge depth.

The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.
### POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)

#### BR-2/3AG

- **Nominal voltage (V)**: 3
- **Nominal capacity (mAh)**: 1,450
- **Continuous drain (mA)**: 2.5
- **Operating temperature (°C)**: -40 to +85
- **Weight (g)**: 13.5

#### BR-A

- **Nominal voltage (V)**: 3
- **Nominal capacity (mAh)**: 1,800
- **Continuous drain (mA)**: 2.5
- **Operating temperature (°C)**: -40 to +85
- **Weight (g)**: 18.0

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### DISCHARGE TEMPERATURE CHARACTERISTICS

#### OPERATING VOLTAGE VS. DISCHARGE CURRENT*

- Voltage (V) vs. Discharge current (mA) at various temperatures.

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*Voltage at 50% discharge depth.*

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**POLY-CARBONMONOFLUORIDE LITHIUM BATTERIES (BR SERIES)**

### BR-AG

- **Nominal voltage (V)**: 3
- **Nominal capacity (mAh)**: 2,200
- **Continuous drain (mA)**: 2.5
- **Operating temperature (°C)**: -40 to +85
- **Weight (g)**: 18.0

### BR-C

- **Nominal voltage (V)**: 3
- **Nominal capacity (mAh)**: 5,000
- **Continuous drain (mA)**: 5.0
- **Operating temperature (°C)**: -40 to +85
- **Weight (g)**: 42.0

**DISCHARGE TEMPERATURE CHARACTERISTICS**

**OPERATING VOLTAGE VS. DISCHARGE CURRENT**

This product does not correspond to the special provision A45 (catalog P81*) of IATA Dangerous Goods Regulations 47th Edition. Please be aware that this product must follow the Dangerous Goods Regulations transportation method of United Nations Class 9 (Packing Group II) at the time of transportation.

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* Voltage at 50% discharge depth.

* If you are looking at the web site, please see ‘Transporting’ of ‘Lithium & Micro batteries Data Files are here’.

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